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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Animal Disease Eradication Branch  
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PROGRESS REPORT ON BRUCELLOSIS ERADICATION

By

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Presented at the National Brucellosis Committee Annual  
Meeting, Chicago, Illinois, February 16, 1956

In the report this year I shall endeavor to confine my remarks mostly to improvements which have occurred during the past year, problems still being encountered, and point out steps considered essential to achieve the goal of brucellosis eradication in most of the States by 1960. For the first time since World War II all States have accepted the Uniform Methods and Rules approved by the Animal Disease Eradication Branch, Agricultural Research Service, for conducting the brucellosis eradication program. Table No. 1 shows comparative statistics on brucellosis eradication for the past 12 months compared to the same period a year ago.

*TOTAL CATTLE POPULATION	95,433,000
*COWS TWO YEARS AND OVER	48,574,000

\* Taken from the Agricultural Marketing Service report on  
"Livestock and Poultry on Farms and Ranches, January 1, 1955."

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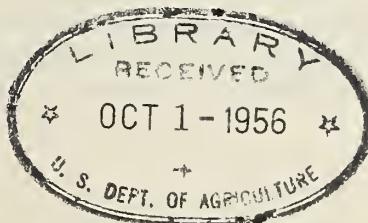




Table 1

	Jan. 1 to Dec. 31, 1954, Inc.	Jan. to Dec. 31, 1955, Inc.
Cattle tested	10,198,460	17,128,877
Reactors found	249,667	429,228
Reactors slaughtered	143,685	362,999
Rate of infection	2.4	2.5
Rate of infection when BRT negative cattle are included	- -	1.1
Replacement calves retained annually	24,095,000	24,522,000
No. of calves officially vaccinated	4,061,348	4,607,973
Herds certified	58,381	81,909
Counties certified	350	434

Map No. 1 shows the number of States now operating under State laws or regulations which provide for area work after a majority of livestock producers have requested such a program. The percentage of owners who request area work in the different States vary all the way from a majority of livestock producers representing a majority of the cattle to 75 percent of the owners representing 95 percent of the cattle in a given area. You will note this map gives a comparison of the number of States with laws or regulations authorizing area work a year ago and at the present time. We now have the highest number of States which have accepted the proposition that in order to reach the goal of a modified certified brucellosis-free area, the program must be so set up that every herd owner in a given area be required to place his herd under one of the approved plans. In States where a large number or all of the Counties in the State have been established as modified certified brucellosis-free, each of the provisions of the Uniform Methods and Rules has been adopted as minimum requirements for achieving this goal. In the last report of the Brucellosis Committee of the United States Livestock Sanitary Association recommendations were made for a change in the present requirements for setting up area work which now provides for petitions from 75 percent of the owners representing 95 percent of the cattle to 75 percent of the cattle owners representing a majority of the cattle. This and other recommended changes in the Uniform Methods and Rules will be incorporated in the next draft of these Methods and Rules which has been used as a guide for brucellosis eradication. I am sure that most of the States will adopt promptly the recommended changes, thereby making it less difficult to set up area programs.

Several interested groups including the Intermountain Veterinary Medical Association and Purebred Dairy Cattle Association have recently adopted resolutions which in the interest of economy and of hastening the adoption of area programs have recommended indemnity payments for reactors slaughtered on account of being affected with brucellosis be limited to those reactors disclosed in areas designated for area programs.

Map No. 2 shows the percentage of Brucella infection by States. The States have been grouped for this purpose. However, statistical tables are included in this report which give the status in each State. Until January 1956 all percentages of Brucella infection used in statistical reports were based on reactors disclosed to the blood serum agglutination test alone. It has been obvious for some time that in States using the Brucella ring test extensively this method of calculating the percentage of infection did not give credit for the progress being made in such States. Consequently in January of this year, animals classified as negative to the Brucella ring test have been included with animals blood tested in determining the percentage of Brucella infection. It is necessary to explain in a footnote on the Statistical Tables that the number of cattle Brucella ring tested has been estimated. You will note the percentage of brucellosis as shown in Table 1 calculated on this basis is 1.1.

Map No. 3 shows the percentage of calves vaccinated against brucellosis in the different areas. You will note the percentage of Brucella infection is closely related to the percentage of calves vaccinated. Where the highest percentage of calves has been vaccinated, there is invariably the lowest percentage of brucellosis. In this connection there is quoted from a report of the Brucellosis Committee of the American Veterinary Medical Association and adopted at the annual meeting of this Association held in Minneapolis, Minnesota, August 16-18, 1955, the following:

"Recognizing the important role that calf vaccination has played in bringing bovine brucellosis under control, your Committee urges continuation and expansion of this phase of the program. Because transmission to other susceptible cattle is not involved, it is our opinion that in the beef breeds, particularly in the range States, brucellosis can be eradicated by vaccination alone with blood testing required only when necessary for area certification and to conform with other regulations."

Since that time all other interested groups I have met with have gone on record as favoring calf vaccination at the highest possible level in all States until all have been certified as modified brucellosis-free areas. The following is quoted from the report of the Brucellosis Committee of the United States Livestock Sanitary Association which was made last November at their annual meeting held in New Orleans, Louisiana:

"The use of Brucella ring test should be expanded."

"In the interest of economy and efficiency the possibility of developing a screen testing method for range areas should be fully explored. Such screen method, when developed, should be incorporated into the Uniform Methods and Rules for the Establishment and Maintenance of Modified Certified Areas."

"The program recommended by the Association and approved by the Animal Disease Eradication Branch for brucellosis eradication in swine and goats should be adopted in all areas where the disease is a problem in these species."



"Research should be continued in the interest of further eliminating the problem of vaccinal and non-specific reactions which are in many herds the only evidence of Brucella infection."

"The Committee recommends that a trade-marked shield and "V" tattoo for official vaccination be approved as a substitute for the presently used "V".

"When at least seventy-five percent (75%) of the Counties of a State have signed up under an area program, it is recommended that the State legislature declare or empower the responsible State official to declare the entire State under an area program."

Map No. 4 shows the number of State brucellosis committees in 1955 as compared to those in 1954.

Chart No. 1 shows the number of cattle tested for brucellosis during 1954 as compared to 1955.

Chart No. 2 shows calves vaccinated against brucellosis for the same period.

Map No. 5 shows status of State funds available for brucellosis eradication during the fiscal year 1956 as compared to fiscal year 1955.

Map No. 6 shows percentage of cattle tested in 1954 as compared to 1955.

Map No. 7 shows percentage of cattle Brucella ring tested in 1954 as compared to 1955.

Map No. 8 shows the States which have accepted the new interpretation of blood tests recommended by the United States Livestock Sanitary Association at their annual meeting held in Omaha, Nebraska, November 1954 and adopted by the Animal Disease Eradication Branch in March 1955. The new interpretation which was fully justified by research before it was adopted has contributed immeasurably in encouraging wider use of Brucella vaccine.

At the meeting of the American National Cattlemen's Association last month approval was given to a proposed interstate regulation pertaining to brucellosis; copy attached.

The National Brucellosis Committee after making a careful study of this matter several years ago recommended a regulation the provisions of which were finally agreed upon at a meeting held in Washington, D. C. in September 1953. This proposed regulation approved last month by the American National Cattlemen's Association includes all of the provisions of the draft approved by your Committee at the meeting held in Washington, D. C. September 1953 and in my opinion should be adopted.

Our most serious problems at the present time are:

1. With the almost complete change in the clinical picture of brucellosis from storms of abortions and other serious losses to a disease which is now causing fewer and fewer abortions, there is real danger of complacency.



2. While there has been a marked improvement since practicing veterinarians have accepted the responsibility of performing most of the service at the farm and ranch level, in some States we are still plagued by a shortage of personnel. This is especially true in the range States where owners are equipped to hold their cattle in close confinement for only short periods.

3. The problem of retaining certified brucellosis-free areas is no small one. Work done in North Carolina recently where only 187 positive herds were disclosed on a Brucella ring test of all dairy herds in the State point out the feasibility of maintaining a check on a modified certified brucellosis-free area so far as dairy herds are concerned at a nominal cost. When a screening test for other than dairy cattle has been worked out, it should be possible to maintain a certified brucellosis-free status in all areas without excessive cost. In the report from Washington referred to later you will note very encouraging results have been obtained by collecting blood at slaughtering establishments. All slaughtering in Washington, except that done for home consumption, is done under State-Federal inspection.

In conclusion I should like to call attention to:

1. Greater progress has been made in brucellosis eradication during the past year than for any similar period since the project was begun on a national scale.

2. The only States which have reached the status of a modified brucellosis-free area are those which have incorporated in their laws or regulations all of the procedures recommended for brucellosis eradication as now outlined in Uniform Methods and Rules approved by the Animal Disease Eradication Branch and all other organizations concerned with the brucellosis problem.

3. A modified brucellosis-free status is only the first plateau as Hal March would say about the \$64,000 question. We should not even slow down until we reach the top which is a certified brucellosis-free area. In a modified free area we still have the embers which can cause a conflagration if we do not complete the job.

4. When brucellosis has been eradicated it will stand as one of the greatest accomplishments in the long and successful campaign to control or eradicate communicable diseases of domestic animals, because it was more widespread at the beginning of the campaign than any other disease of animals which has thus far been brought under control or eradicated. Furthermore, brucellosis has lent itself to more misunderstanding and confusion than any other disease we have dealt with.

I would be remiss if I did not express to the National Brucellosis Committee my sincere appreciation for the time and energy you have contributed to this and other animal disease eradication projects. The letters sent out by the National Brucellosis Committee last year in which you pointed out certain deficiencies still existing in some States were well received so far as I have been able to learn and most rewarding. I have in mind one State where I had been discussing the

matter of setting up the program so that it could be conducted on an area basis. I was repeatedly told that such a program could not be set up until action had been taken by the State Legislature. However, upon receipt of your letter, the Livestock Sanitary officials of this State became so disturbed that the matter was discussed with the Livestock Board of the State and the Attorney General who ruled that sufficient authority to set up area work now exists. That State is making outstanding progress in brucellosis eradication today. I hope you will find time to check over the deficiencies yet remaining this year and call attention to them as you did last year.

ALABAMA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	67,683	296,793
Reactors found	2,335	10,290
Reactors slaughtered	328	5,285
Rate of infection	3.45	3.47
No. of calves officially vaccinated	47,872	58,963
Herds certified	78	87
Counties certified	0	0

An all out war is being waged against bovine brucellosis. Emphasis has been placed on calf vaccination, blood testing and removal of reactors for slaughter, county area testing for the purpose of certifying individual herds and certifying county areas.

The milk ring test is being used and appears to be very popular with the Industry and cooperating agencies.

Our objective is to vaccinate all calves remaining on the farm for breeding purposes, to test and remove all reactors to slaughter, to keep all infected premises under quarantine, and to have a milkified certified brucellosis-free State on or before January 1960.

ARIZONA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	26,268	41,093
Reactors found	654	516
Reactors slaughtered	225	252
Rate of infection	2.49	1.26
No. of calves officially vaccinated	11,021	11,276
Herds certified	1	1
Counties certified	0	0

Brucellosis control and eradication in the State of Arizona has been progressing quite satisfactorily in spite of the recognized weaknesses of the State brucellosis law.

It is understood that the proposed legislation regarding brucellosis as drawn up by the State Brucellosis Committee and approved by the various dairy and livestock associations, will again be introduced during the present regular session of the legislature.

Through the use of the brucellosis ring test on samples from producers throughout the State, the dairy herd infection as indicated by the test, has been determined to be below the percentage previously estimated. According to the results of the brucellosis ring test the percentage of suspicious herds is 28.6 percent.

Area testing on a voluntary basis in two range counties revealed three reactors out of 3,828 head tested. This supports our belief that the percentage of infection in our range areas is below the percentage required for the certification of counties as outlined in the Uniform Methods and Rules pertaining to brucellosis.

The objective is to have the State ready for certification as a modified certi brucellosis-free area on or before January 1, 1960.



ARKANSAS

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	37,690	126,151
Reactors found	2,487	5,951
Reactors slaughtered	660	5,564
Rate of infection	6.60	4.72
No. of calves officially vaccinated	85,461	84,406
Herds certified	4	6
Counties certified	0	0

In Arkansas it is deemed necessary that definite, regular and adequate appropriations of brucellosis funds be provided to maintain a definite policy and that the program will not be subjected to periodic pick-ups and slow-downs. These changes embarrass all personnel engaged in the work and impart to the public an attitude of uncertainty. Use of practicing veterinarians is necessary. Educational work should be carried out.

A calf vaccination program should be encouraged and broadened. Follow through with proper and sufficient tests and retests at regular intervals of time in dealing with known infected herds.

The objective to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

# CALIFORNIA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	0	20,689
Reactors found	0	369
Reactors slaughtered	0	297
Rate of infection	0	1.78
No. of calves officially vaccinated	360,569	356,342
Herds certified	0	0
Counties certified	0	0

Statewide calf vaccinations continue to be the basis for the program in California. A slight reduction in the number of animals vaccinated during the past year is reported. This is due to the fact that a considerable reduction in the number of eligible calves is being retained for replacements in the herds throughout the State. Quite a large number of herds have been liquidated both in the dairy and beef departments due to the current prices. The supplemental per herd fee paid the practicing veterinarians for the smaller groups of calves has reportedly resulted in a much closer approach to the 100 percent goal in the vaccination of all calves.

The two State regulations which became effective January 1, 1956 provide that dairy cattle imported into the State shall pass a negative blood test for brucellosis or be certified as officially calf vaccinated. A similar regulation pertaining to intrastate movements of dairy cattle is considered to be of much potential value in the control of the disease. Both of these regulations are being accepted and endorsed by the industry with few exceptions.

A survey of all dairy herds in the State by the milk ring test was completed during the year which indicated approximately two-thirds of the herds were free from the disease. Experimental work was conducted on the whey test by Dr. H. S. Cameron of the University of California assisted by Animal Disease Eradication Branch and the State Office. This test was applied to the individual animals in the herds and conducted on approximately 3,000 head of cows and comparative blood tests were made. Indications are that the whey test is as reliable in detecting an infected animal as the conventional blood test. The State officials and leaders in the industry are very much interested in this type of test and it is hoped that it might be applied as a supplement to the blood test in an eradication program. Further work is being done with this project at the present time using the trailer laboratory and personnel for the purpose.

Surveys indicate that the incidence of the infection in dairy cattle in the State at the present is approximately 4 percent as compared to 17 percent at the time of the inauguration of the vaccination program in 1948.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

COLORADO

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	128,931	98,511
Reactors found	2,916	1,929
Reactors slaughtered	2,486	2,070
Rate of infection	2.26	1.96
No. of calves officially vaccinated	95,905	69,981
Herds certified	35	34
Counties certified	0	0

The brucellosis project in Colorado has made reasonable progress under an entirely voluntary basis this past year.

No area type testing is being done at this time as our previous attempts to complete several areas for certification have failed due to the fact that no enabling act is available for use for the final completion of the very few herds in each county attempted.

The vaccination of calves has continued to progress, the entire program being promoted, and financed by the livestock industry on a voluntary basis.

The ring test activity has been developed to a point where practically the entire dairy industry is now being serviced every 4-6 months.

The lack of sufficient funds required the cessation of fee basis testing and indemnity payments on reactors about August 1955. Since that time, herd owners have been encouraged to continue testing at their own expense.

CONNECTICUT

	January 1 to December 31, 1954, Inc.	January 1 to December 31 1955, Inc.
Cattle tested	97,024	115,867
Reactors found	1,340	1,053
Reactors slaughtered	15	10
Rate of infection	1.38	0.91
No. of calves officially vaccinated	20,679	18,509
Herds certified	1,043	1,754
Counties certified	0	0

In June 1955, the Connecticut Legislature passed a bill which provides that all milk producers must be in a blood testing program by April 1, 1956 and that all reactors must be disposed of by April 1, 1957. Compulsory branding of all reactors and tattooing of all calf vaccinates were a part of the bill and the State Department has voluntarily made effective the use of a reactor tag. Quarantine of reactors was in effect prior to passage of the bill and proper age limits on calf vaccination had been employed since calf vaccination was inaugurated ten years ago.

Milk ring testing was initiated in August 1955 on all herds producing milk for sale.

The bill provides for area program work under Uniform Rules. Some 5,000 small herds not selling milk will be incorporated into the program through this change..

No indemnity is currently paid on reactors.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



DELAWARE

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	53,809	52,594
Reactors found	1,004	766
Reactors slaughtered	1,122	767
Rate of infection	1.87	1.46
No. of calves officially vaccinated	6,377	5,133
Herds certified	459	838
Counties certified	0	0

The brucellosis program has moved forward and made good progress during the past year.

New Castle county was certified as a modified certified area effective January 1, 1956.

We expect to complete area testing in Kent county about March 15, 1956 and anticipate certifying the county. Upon completion of Kent county, all personnel will be used to complete area testing in the remaining county of Sussex.

Excellent cooperation has been received from the dairy farmers, purebred breeders, Extension Service, State Board of Health, and the Brucellosis Committee. Good cooperation has also been received from all commercial dairies except one.

Under the Delaware area program, tuberculin testing is carried on at the same time in order that in the future both the recertification and reaccreditation of each county will become due simultaneously.

State officials have been hampered by lack of a compulsory testing law. The present law only permits the quarantine of the cattle and products of those cattle in event the owner refuses to test. Plans are under way to attempt to correct this law at the next legislature.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before December 31, 1956.

FLORIDA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	97,234	154,899
Reactors found	1,725	3,480
Reactors slaughtered	885	3,400
Rate of infection	1.77	2.25
No. of calves officially vaccinated	34,493	60,669
Herds certified	54	51
Counties certified	0	0

The accelerated program was slow getting started due primarily to the fact that services of accredited veterinarians had not heretofore been used in animal disease eradication work. After considerable educational work, a large amount of testing and calf vaccination was accomplished by practitioners. The volume of work was increasing each month until in August 1955 when we received information that the amount of our allotment had been materially reduced from that requested for financing the program during this fiscal year. This necessitated immediate action to curtail all fee testing and payment of indemnity. Such drastic action resulted in demoralizing the program; however, through continued effort some improvement has been made in the volume of herds tested and calves vaccinated. We regret we are not in position to state that the program as conducted in this State during this fiscal year has been altogether satisfactory, as it is utterly impossible to operate a program of this nature without adequate funds. Should provisions be made for adequate Federal and State funds for the next fiscal year, it is believed we can operate a satisfactory brucellosis eradication program.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

GEORGIA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	163,893	331,873
Reactors found	8,462	7,648
Reactors slaughtered	1,163	4,293
Rate of infection	5.16	2.30
No. of calves officially vaccinated	18,668	37,712
Herds certified	5	15
Counties certified	7	7

The program in Georgia applies the nationally adopted Uniform Methods and Rules. Plans A, B, C and D are available. Plan A is pushed and adult vaccination under D is available only by special permission. Widespread vaccination of calves is encouraged and orange colored ear tags are used to identify calf vaccinates.

BRT coverage of the State is obtained approximately every four months. One hundred ninety agent cooperatively controlled veterinarians are authorized to provide service. The program is on a voluntary basis at present; however, it is intended that area testing be started soon. All cattle sold through Georgia livestock sales establishments must be negative to a test for brucellosis except those going to slaughter. Calves passing through such sales for purposes other than slaughter will soon be required to be vaccinated. A swine brucellosis eradication program has been recently inaugurated. State laws provide for measures required for eradication. Although lack of funds curtailed the program since August, a "Brucellosis-Free Georgia by 1960" which is the State's goal is realistic.

IDAHO

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	64,231	99,041
Reactors found	2,016	2,401
Reactors slaughtered	1,345	2,364
Rate of infection	3.14	2.42
No. of calves officially vaccinated	137,999	130,535
Herds certified	14	6
Counties certified	8	8

Idaho has ample laws to carry on brucellosis work on an area basis. To date we have eight certified counties and 14 additional counties have signed up for area work and within the next 90 days we expect to have several more counties request area work.

The interest of the livestock men in the State is very high and they request that the work be carried on to completion. The last session of the State Legislature increased State appropriations for brucellosis disease control. Blood testing during the calendar year 1955 increased 76 percent over the calendar year 1954, and an estimated 75 percent of our heifer calves were vaccinated. Two milk ring tests were made on all herds selling milk to milk plants. The percent of reactors to the blood test continues to show a slight decrease.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



ILLINOIS

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	470,091	727,187
Reactors found	10,901	15,908
Reactors slaughtered	6,814	13,087
Rate of infection	2.32	2.19
No. of calves officially vaccinated	145,446	131,199
Herds certified	123	141
Counties certified	0	0

The cooperative brucellosis program in Illinois is being operated in a satisfactory manner. The State has been divided into seven districts, which are supervised by four Federal and three State supervisors. Each of these supervisors is carrying on an extensive eradication program in his district, and the procedure of tagging, branding, and quarantining reactors is being enforced in all instances.

The blood testing work is being done by 423 practicing veterinarians on a fee basis. The ABR testing program is being carried on by five Federal and six State milk collectors, with coverage of all milk plants in the State at six-month intervals.

Illinois brucellosis law provides authority to the Director of Agriculture under conditions which exist now in most counties for designating the county for area brucellosis eradication.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

INDIANA

	January 1 to December 31, 1954, Inc.	January 1 to December 31 1955, Inc.
Cattle tested	294,483	646,911
Reactors found	10,368	14,991
Reactors slaughtered	277	9,324
Rate of infection	3.52	2.32
No. of calves officially vaccinated	55,118	58,172
Herds certified	958	1,544
Counties certified	1	1

The accelerated brucellosis program has met with excellent support from all concerned. Forty-eight of the 92 counties have now petitioned for compulsory area work and testing is either in progress or has been completed.

Better than 95 percent of the owners of infected herds follow Plan A. Infected herds are quarantined until reactors have been removed and a negative test conducted. The infection rate varies between 1 and 3 1/2 percent.

Three counties have been recommended for certification and countywide tests have been completed in 12 others. After initial area tests all ring suspicious herds, as well as any other herds disclosing infection, are required to be blood tested.

We have been unable to demonstrate in Indiana a material saving by eliminating ring negative herds on initial area tests due to the number of beef and other herds not marketing milk.

Our target date for certification of the State continues to be 1960.

IOWA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	341,754	431,472
Reactors found	19,396	22,453
Reactors slaughtered	17,138	21,558
Rate of infection	5.68	5.20
No. of calves officially vaccinated	190,489	232,086
Herds certified	1,235	5,480
Counties certified	0	0

Brucellosis eradication in Iowa has shown a marked increase due for the most part as a result of the BRT work which has been made available to all but three of the 99 counties in the State. Active brucellosis committees have been established in those 96 counties.

The bill presented to the Iowa Legislature in 1955, which became a law, was poorly worded even though the Agricultural Committee was advised to that effect. It was discriminatory in that native cattle were penalized in comparison to cattle imported for feeding purposes and for that reason the Secretary of Agriculture was enjoined from its enforcement. Leaders in farm organizations have assured us that legislation will be enacted in the 1957 session of the Legislature which will control the movement of cattle and provide for compulsory area testing.

Area testing is in progress on a voluntary basis at this time. It is being made available to all counties which present petitions, carrying 75 percent of the cattle owners, to the Secretary of Agriculture. If vaccine can be made available as part of the program for area work, at least 10 counties will avail themselves of area work before the end of June 1956. For that reason livestock interests are hopeful that additional Federal funds will be made available for matching State funds in order that the accelerated program can be continued.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

KANSAS

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	159,530	171,476
Reactors found	4,613	6,315
Reactors slaughtered	0	4,056
Rate of infection	2.89	3.68
No. of calves officially vaccinated	94,194	84,780
Herds certified	17	24
Counties certified	0	0

The brucellosis eradication program has exceeded expectations. Inquiries have been received from several counties that would like to go on area work, but this has had to be ruled out due to the lack of funds. Improvement in the brucellosis program has been as follows:

More calves have been officially vaccinated and recorded than ever before.

More blood tests have been made officially as a result of the ABR tests in screening infected herds.

The benefits gained by the use of the ABR tests are hard to to evaluate.

Rules and regulations have been promulgated by the State Livestock Sanitary Commissioner to conform with national policy.

The State Livestock Sanitary Commissioner is endeavoring to get State funds appropriated toward furthering this program.

The deficiency is the lack of funds.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



KENTUCKY

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	54,583	194,157
Reactors found	2,048	7,417
Reactors slaughtered	834	6,421
Rate of infection	3.75	3.82
No. of calves officially vaccinated	51,677	33,998
Herds certified	2	2
Counties certified	0	0

The brucellosis program is being conducted under Plans A and B with all reactors tagged, branded and held under quarantine on the farm until slaughtered. Kentucky is in the enviable position of having never advocated adult vaccination and there are no known complete adult vaccinated herds. Calves are no longer required to be bled at time of vaccination. All calves are to be tagged and tattooed using K for Kentucky, V for vaccination with the figures 1, 2, 3, and 4 identifying the quarter, and 6 for the year. The ring test has been adopted and State money appropriated to start this phase of the program. Practically all bleeding is done on a fee basis.

There is no area testing at this time. However, regulations will be promulgated making it mandatory for all herds to have a brucellosis test when a stipulated percent of owners have signed up under the program.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

LOUISIANA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	85,612	397,888
Reactors found	9,403	30,567
Reactors slaughtered	4,668	37,901
Rate of infection	10.98	7.68
No. of calves officially vaccinated	74,374	93,497
Herds certified	0	1
Counties certified	0	0

The accelerated brucellosis program in Louisiana during calendar year 1955 was marked by the greatest volume of blood testing conducted in the State since the 1930's. There were 397,888 cattle blood tested and three complete rounds of BRT surveys over the State. The infection rate as revealed by the blood tests ranged from a high of 10.6 percent early in the year to a low of 6.3 percent in November and December for a yearly average of 7.7 percent. Because of somewhat limited Federal funds, we have been unable to derive maximum benefits from the total of State funds available. We feel that the rate of infection is being reduced to a point that will make area testing feasible and anticipate the passage of a State law during the legislative session which convenes in May 1956 that will make this goal a reality.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

MAINE

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	99,743	145,805
Reactors found	796	662
Reactors slaughtered	1,105	693
Rate of infection	0.80	0.45
No. of calves officially vaccinated	8,637	8,845
Herds certified	850	2,267
Counties certified	16	16

Certified State - Presently up-to-date with the exception of one county in which we are now working.

Sale of milk or milk products - From B herds prohibited after July 1, 1956. The number of B herds in the State has been reduced to five at the present time.

Increased Interest in Vaccination - Through Extension Service and practicing veterinarians as well as through the mailing of material to farmers with test charts and ring test returns. Tattooing of vaccinated calves is now in force. This is of great advantage for export purposes.

Ring Test - Cover about 25 percent of the herds. Most of the farmers like the ring test, but a large majority of them would like to have an occasional blood test also.

There is some disadvantage in law enforcement by not having ear tag numbers with the ring test.

MARYLAND

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	222,259	390,619
Reactors found	7,182	6,858
Reactors slaughtered	3,403	9,620
Rate of infection	3.23	1.76
No. of calves officially vaccinated	44,225	49,505
Herds certified	3,832	4,568
Counties certified	4	4

The accelerated brucellosis program was inaugurated in January 1955. The demand for testing has been stimulated also by the requirements of the Washington Health Department that, effective January 1, 1955, milk must come from negative herds.

Baltimore city also enacted health requirements that milk must come from negative herds, effective January 1, 1956.

Due to restrictions on Federal funds, it was necessary to adjust our activities in accordance with available funds.

With the employment of fee testing veterinarians, we were able to expand our activities to cover the greater portion of concentrated cattle areas in the State.

An active State Brucellosis Committee has been set up during the past year to promote the program.

Shortage of trained personnel to properly supervise fee testing veterinarians has been one of our deficiencies.

Plans are in motion to inaugurate brucellosis ring testing in the near future.

With all commercial milk producing herds under supervision, having had one or more tests, and with 4,568 herds composed of 111,759 cattle in a certified herd status, it is felt that good progress has been made.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



MASSACHUSETTS

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	30,174	32,219
Reactors found	532	546
Reactors slaughtered	6	323
Rate of infection	1.73	1.70
No. of calves officially vaccinated	17,539	17,520
Herds certified	273	300
Counties certified	0	0

The brucellosis cooperative program is currently on a voluntary basis. Early in 1955 in order to participate in the accelerated brucellosis program, the State officials drew up regulations which conform with the Uniform Rules and Regulations adopted by the United States Livestock Sanitary Association, and approved by the Branch. Plans A, B, and C are followed.

Reactors are tagged, branded, and practically 75 percent of the reactors are moved for immediate slaughter. Vaccination is limited to calves at the proper age 4-8 months. County brucellosis committees have been busy working closely with the State Brucellosis Committee to see if we could strengthen our present State laws to control imports, set deadlines for area work, and request additional State funds to become effective beginning the fiscal year July 1, 1956. We hope to expand and encourage the use of the ABR testing. It is planned to use veterinary practitioners on a fee basis as far as State and Federal funds will permit.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

MICHIGAN

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	121,814	290,156
Reactors found	4,017	14,149
Reactors slaughtered	2,628	9,953
Rate of infection	3.30	4.88
No. of calves officially vaccinated	21,503	34,568
Herds certified	121	177
Counties certified	28	29

The fifteen counties in the upper peninsula are presently certified. It is planned to place all 15 of these counties under a test and slaughter program, with followup ABR testing, continued blood testing of all infected herds, and compulsory slaughter of all reactors disclosed.

There are farm to farm milk collections of the 27 counties in the lower peninsula north of townline 16, and followup blood tests of all herds suspicious to the ABR test and all nonmilking herds. Certification of these counties is the goal to be obtained as rapidly as possible.

Farm to farm milk collections of the 41 counties south of townline 16 and a followup testing of all herds suspicious to the ABR test are made. Nonmilking herds will be included in all counties with a low percentage of infection in an attempt to have a complete coverage of the county in case the county will qualify for certification. Less stress will be put on including all nonmilking herds in counties with a high percentage of infection until such time as a final "drive" can be obtained in such counties for complete eradication.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

MINNESOTA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	1,815,789	3,011,103
Reactors found	38,839	35,890
Rate of infection	2.14	1.19
No. of calves officially vaccinated	134,300	140,530
Herds certified	61	55
Counties certified	34	51
Reactors slaughtered	27,567	30,889

The outstanding record of brucellosis eradication in Minnesota speaks for itself. It is anticipated that all counties can be certified as modified brucellosis free by July 1, 1957.

MISSISSIPPI

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	65,603	273,963
Reactors found	3,185	11,282
Reactors slaughtered	1,509	8,748
Rate of infection	4.85	4.12
No. of calves officially vaccinated	90,345	103,851
Herds certified	12	4
Counties certified	0	0

During 1955 testing increased threefold. The Brucella ring test was inaugurated in April 1955.

There are adequate laws on the Statutes of Mississippi for area testing toward brucellosis eradication.

Sufficient veterinary personnel is available for most localities in the State. Full service could and would be supplied when ample funds become available. Veterinary service has been satisfactory.

Good cooperation has been obtained from herd owners in cleaning and disinfecting premises.

State Board Health regulations require all Grade A dairies to be under Plan A or B by January 1, 1958.

No definite program on swine brucellosis in operation. Some testing done in purebred swine herds, and other herds where breeding of swine for sale purpose is practiced. All testing done under approved procedures.

Our State Brucellosis Committee has been very active during the past six months. They, along with breed associations, are working toward securing adequate State funds for the brucellosis eradication program after June 30, 1956.

Present objectives - continue calf vaccination under county area plan. Continue to blood test herds on individual herd plan. Incorporate all dairy herds suspicious to milk ring test as soon as funds become available.

We feel that we have good prospects for obtaining State funds for the brucellosis eradication project. We know that the demand for the work is here. With ample State and Federal funds we can make good progress toward eradication of the disease in the immediate future. Our goal is to eradicate brucellosis infection in the State by January 1, 1960.



MISSOURI

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	272,678	776,087
Reactors found	10,914	22,141
Reactors slaughtered	3,182	24,034
Rate of infection	4.00	2.85
No. of calves officially vaccinated	94,578	174,156
Herds certified	9	19
Counties certified	0	0

The Missouri Brucellosis Law, providing for area testing and vaccination programs, as well as requiring that all animals imported into, sold, bartered, exchanged or transported within the State of Missouri must have passed a negative test within thirty days prior to such action, was passed by the legislature and became effective on August 29, 1955. Funds for the enforcement of the law and to pay for testing, vaccination, branding and tagging of reactors, and to pay for the vaccine for a period of two years, were appropriated. Through Federal funds for the acceleration of the brucellosis program, as well as those appropriated by the State Legislature, the volume of work was over three times that of the previous year. During calendar year 1955, the records indicate that 19,695 reactors were slaughtered. If additional Federal funds can be made available to supplement those provided by the State, still further gains can be made.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

MONTANA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	393,907	488,517
Reactors found	5,778	4,651
Reactors slaughtered	3,486	4,068
Rate of infection	1.47	0.95
No. of calves officially vaccinated	247,194	303,356
Herds certified	0	0
Counties certified	4	11

The volume of testing and vaccinating accomplished during the first six months of fiscal year 1956 has been comparable to that attained in fiscal year 1955. The rate of infection has dropped to 0.72 percent of the 277,301 cattle tested during that period. Also during the first half of fiscal year 1956, area testing has been extended to 10 additional counties, bringing the total number of disease control areas to 50 of the State's 56 counties. It is anticipated that the remaining six counties will soon petition for inclusion in the program. One-fourth of the counties in the State (14) have now qualified as modified certified brucellosis-free areas. With the testing in final stages in many counties, we expect to double the number of certified counties within the next few weeks.

A comparison of test records with the Agricultural Marketing Service statistics indicates that area testing has advanced into the final one-third of total herds of cattle in the State of Montana. It is estimated that approximately 75 percent of the counties in Montana will be modified certified brucellosis-free areas by the end of fiscal year 1956 or they will be in the final stages of testing. If adequate funds are available, it is entirely within the realm of possibility that the State of Montana will qualify as a modified certified brucellosis-free State by the end of calendar year 1956 or shortly thereafter.

NEBRASKA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	175,148	399,102
Reactors found	4,752	8,306
Reactors slaughtered	6,734	8,191
Rate of infection	2.71	2.08
No. of calves officially vaccinated	106,805	148,413
Herds certified	581	1,937
Counties certified	2	3

Two major modifications were made in the brucellosis program in the State of Nebraska during the past year. The first involved passage of Legislative Bill 471 which provided that livestock owners be entitled to strain 19 vaccine and its administration without cost. As a consequence, increased interest in the vaccination program has resulted.

Secondly, a swine brucellosis program was approved and adopted by the State Brucellosis Committee.

There are presently 41 of the 93 Nebraska counties operating in part or in their entirety on the official program, thirty-two in the open area of the State under the test and slaughter program and nine in the range section where strictly vaccination is practiced. In addition petitions are circulating and meetings have been scheduled in approximately 25 other counties.

There are four certified counties and the possibility that an additional 10-12 will be eligible for certification by the end of the present fiscal year.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

NEVADA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	10,520	15,518
Reactors found	176	349
Reactors slaughtered	211	396
Rate of infection	1.67	2.25
No. of calves officially vaccinated	40,915	55,180
Herds certified	108	108
Counties certified	0	0

The State-Federal Cooperative Brucellosis Eradication Program in Nevada had been conducted on a voluntary owner agreement basis since 1940. On May 10, 1955 a meeting was held with the Nevada State Board of Stock Commissioners relative to the brucellosis project in the State. As a result of this meeting, the Commissioners agreed to promulgate brucellosis eradication regulations providing for the area plan of eradication in any county wherein 75 percent of the owners, owning 60 percent of the cattle in a county or area, signed a petition requesting such designation.

As of January 23, 1956, eight counties in the State are now designated brucellosis eradication areas with one more county pending and one of the nine counties has qualified as a certified brucellosis-free area.

In addition to the foregoing, the State Board of Stock Commissioners has also agreed to promulgate a compulsory brucellosis calf vaccination regulation on the same basis as the request for the area plan of operation. To date, no petitions have been submitted requesting such a program.

The State brucellosis regulations which have been promulgated are in keeping with the recommendations of the National Brucellosis Committee and approved by the Branch, relative to methods and procedures with the exception of a few minor changes.

The progress in brucellosis eradication is due largely to the close cooperation of the State Livestock Sanitary officials, livestock producers, services of practicing veterinarians, and an increase in funds made available by the Federal government.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



NEW HAMPSHIRE

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	97,038	94,135
Reactors found	234	98
Reactors slaughtered	358	165
Rate of infection	0.24	0.10
No. of calves officially vaccinated	11,724	10,130
Herds certified	6,072	5,415
Counties certified	10	10

Entire State certified brucellosis-free area since August 1, 1949.  
One hundred percent cows tested 1955 and 55 percent calves vaccinated.

Practicing veterinarians under supervision of both State and Federal officials do practically all of the field work in connection with the project.

New Hampshire operates under Plan A test and slaughter with a voluntary calf vaccination program. The law provides that any herd that has 10 percent or more reactors on any test must adopt a calf vaccination program or lose their right for State indemnity on any animals that may be condemned on any future tests.

Approximately 95 percent of the herds in the State are fully certified and have been issued certified herd certificates.

All animals are tested yearly.

NEW JERSEY

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	156,701	199,084
Reactors found	1,880	2,533
Reactors slaughtered	1,039	2,324
Rate of infection	1.20	1.27
No. of calves officially vaccinated	19,786	17,043
Herds certified	2,809	3,296
Counties certified	1	1

At the last meeting of the State Brucellosis Advisory Committee, the following recommendation was adopted: All brucellosis reactors shall be tagged and quarantined. Reactors may be retained temporarily in a herd if the owner does not desire Plan A. When sold, reactors may be sold only for slaughter. This becomes effective July 1956 until superseded by requirement that reactors be branded and slaughtered immediately starting July 1, 1957. The New Jersey State Board of Agriculture has officially notified the Advisory Committee that the Board adopted this recommendation also, with the request that appropriate legislation be introduced to effectuate it. This legislation will be prepared for introduction at the new session of the Legislature.

The work is proceeding at a good rate. Acting Secretary of Agriculture, William C. Lynn, in his annual report on January 24 stated that the State will ask for supplemental appropriations to pay indemnity on the brucellosis reactors found this year.

According to another recommendation made by the State Brucellosis Advisory Committee and later adopted by the State Board of Agriculture, the State contemplates compulsory testing on an area basis over the entire State starting July 1, 1956, also compulsory slaughter of all brucellosis reactors found on and after July 1, 1957. It is understood that legislation necessary to carrying out the above recommendations is being prepared.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1959.

NEW MEXICO

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	39,594	68,565
Reactors found	246	607
Reactors slaughtered	213	638
Rate of infection	0.62	0.88
No. of calves officially vaccinated	15,735	29,641
Herds certified	48.	49
Counties certified	0	0

Brucellosis work under the accelerated program has progressed very satisfactorily. Blood testing has increased by 49 percent and vaccinations by 73 percent for the fiscal year 1955 and further increases are being made in 1956.

Infection was reduced to .5 percent in 1954, but increased to 1 percent in 1955 when range testing was resumed and large infected herds were selected and tested. At present the rate of infection is well under 1 percent.

Area certification tests have been completed in one county and work is in active progress in four other counties. With continuation of the present program, the goal of Statewide certification should be reached by 1960.

The program is being well accepted in both dairy and range areas and the employment of fee basis veterinarians has greatly facilitated the work.

NEW YORK

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	603,456	745,895
Reactors found	11,328	12,603
Reactors slaughtered	0	0
Rate of infection	1.88	1.69
No. of calves officially vaccinated	289,086	291,404
Herds certified	17,842	27,574
Counties certified	0	0

Very satisfactory progress is being made under testing, calf vaccination, and quarantine of reactors by practicing veterinarians paid by New York State Bureau of Animal Industry. Calf vaccination is now conducted as outlined in Uniform Methods and Rules. Reactors are quarantined and may move to slaughter only under State permit.

Plans are in progress whereby the Animal Disease Eradication Branch will furnish a number of serologists and brucellosis technicians to conduct the milk ring test. It is planned to have the entire State under the milk ring testing plan by the end of the calendar year 1956.

No area testing is being conducted at present but will be considered when the entire State is under the milk ring testing program.

Effective January 1, 1956 all cattle moving for dairy or breeding purposes must be negative to a brucellosis test within 30 days of movement; or have been a member of a certified herd or a once clean herd tested within 12 months; or have been officially vaccinated and under 30 months of age.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



NORTH CAROLINA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	289,966	293,655
Reactors found	1,489	1,027
Reactors slaughtered	1,455	1,023
Rate of infection	0.51	0.35
No. of calves officially vaccinated	1,619	1,862
Herds certified	1,328	1,938
Counties certified	100	100

The first round of the milk ring test of all herds supplying milk to Grade "A" fluid and manufacturing plants in North Carolina was finished in October. There was a total of 12,111 herds tested containing approximately 253,482 cattle. Of the herds tested 11,886 were negative to the ring test while 225 were classified as suspect herds. However, only 187 of the suspect herds are located in North Carolina while the remaining 38 herds are located in other States but sell milk in North Carolina. Of the 187 suspect ring test herds that were subsequently blood tested 164 were found to be negative, 4 disclosed suspects, and 9 were found to contain reactors. The 10 remaining suspect ring test herds were known to be infected at the time of testing and are under testing supervision. The percentage of suspect herds found on ring test is 1.5 percent.

Plans are set up to do retesting in the remainder of the 56 counties that were certified for two-year periods and other counties due this year. It is hoped the retesting in these counties will be completed and recommended for recertification by the end of the calendar year.

We anticipate no problem in maintaining North Carolina as a modified certified brucellosis-free State.

NORTH DAKOTA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	420,147	453,129
Reactors found	8,322	8,052
Reactors slaughtered	7,363	8,445
Rate of infection	1.99	1.78
No. of calves officially vaccinated	46,029	63,249
Herds certified	191	267
Counties certified	22	27

There are 27 certified counties in the State.

The 1955 session of the North Dakota Legislature did not include brucellosis as one of the diseases for which an owner could be indemnified in case of condemnation of an animal. State indemnity for brucellosis reactors was discontinued effective July 1, 1955.

The Branch paid accredited veterinarians to vaccinate calves, blood test cattle, and brand reactors on a fee basis from December 9, 1954 until November 19, 1955 at which time funds for this purpose became exhausted and the State assumed this obligation.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

OHIO

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	278,894	302,360
Reactors found	9,893	10,565
Reactors slaughtered	3,480	3,300
Rate of infection	3.55	3.50
No. of calves officially vaccinated	69,742	64,849
Herds certified	1,454	1,470
Counties certified	0	0

The milk ring test was incorporated in the area program on a county-wide basis in September 1949. At the present time, 74 of the 88 counties in this State are participating with 7 additional counties in the process of signing up, and it is expected that they will be added to the program in the near future.

Collection of milk samples are continuing to be made at the individual farms where at the same time a history chart is completed relative to the number and type of cattle, vaccination history, and other points.

There are at the present time 7 field trailers and 2 stationary laboratories in operation.

In agreement with the livestock industry, brucellosis indemnity payments were discontinued in July 1949, and to date have not been reestablished.

Insofar as can be determined, the incidence of brucellosis in the working counties has been reduced, the ultimate goal being to have the entire State incorporated as a unit in the program, and another contemplative objective for the future is stricter control and identification of reactor cattle and their movements.

OKLAHCMA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	77,535	143,054
Reactors found	3,256	6,242
Reactors slaughtered	2,007	4,360
Rate of infection	4.20	4.36
No. of calves officially vaccinated	52,219	79,991
Herds certified	11	13
Counties certified	0	0

One hundred forty-five practicing veterinarians are authorized to participate in the program. A number of meetings held each month to encourage area testing are attended by State and Federal veterinarians. The film, "The Triple Threat of Brucellosis," is generally shown and an effort made to have a committee appointed to accelerate the work.

Petitions for area testing are now being circulated in several counties and we will concentrate on these counties in the hopes of obtaining our objective. State regulations require 60 percent of the cattle owners in a county owning 70 percent of the cattle to petition the State Department of Agriculture for area work before it can become compulsory.

Milk ring testing was started in March 1955.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.



OREGON

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	295,107	300,265
Reactors found	1,620	1,694
Reactors slaughtered	1,578	1,534
Rate of infection	0.55	0.56
No. of calves officially vaccinated	74,868	87,737
Herds certified	0	0
Counties certified	4	9

The 1954-1955 session of the State Legislature enacted a law providing for the establishment of compulsory test counties in the range and semirange areas essentially the same as the United States Livestock Sanitary Association recommendations.

Previously we had only a law for compulsory areas requiring annual tests of all the cattle applicable to the dairy section.

Of the 17 dairy counties, nine are certified and eight are in the process of completing tests on some additional herds primarily of the beef type to qualify for certification.

Of the 19 range and semirange counties five and a half counties are area testing, two have held the required court hearings but have not yet been declared, one is circulating petitions, two are taking the initial steps for the circulation of petitions.

Morrow County has been established as the first modified certified brucellosis-free county in the range and semirange area of eastern Oregon.

Oregon requires the quarantining of infected herds only after establishment of the certification of the county instead of at the beginning of the countywide area testing.

Oregon is actively considering the use of the milk ring test on a broad scale, but must wait supporting legislation by the forthcoming session of the legislature this winter.

Oregon will adopt the proposed uniform type of ear tags as soon as the present supply of tags is exhausted.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

PENNSYLVANIA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	796,415	855,796
Reactors found	8,489	12,769
Reactors slaughtered	11,096	12,350
Rate of infection	1.07	1.49
No. of calves officially vaccinated	136,793	125,856
Herds certified	11,379	13,102
Counties certified	27	34

Pennsylvania now has 34 counties or 50 percent of the State certified.

The brucellosis program is progressing satisfactorily with the exception of securing veterinary services for followup blood testing milk ring suspect herds. More regularly employed veterinarians are needed to take care of this work.

It is believed that Pennsylvania can be certified as modified certified brucellosis free on or before January 1, 1960 if sufficient funds are available.

SOUTH CAROLINA

	January 1 to December 31, 1954, Inc.	January 1 to December 31 1955, Inc.
Cattle tested	102,283	203,419
Reactors found	1,068	1,867
Reactors slaughtered	666	1,383
Rate of infection	1.04	0.92
No. of calves officially vaccinated	9,107	12,281
Herds certified	506	666
Counties certified	8	9

The brucellosis program in South Carolina has now advanced to the point where we are confident that Statewide certification is possible in the foreseeable future. This statement can be proven statistically. It is felt that our future program will be directed toward mechanically proving the above statement and advancing toward complete eradication. We have tested in previously untested areas and areas where infection was thought to exist and the infection rate continues to remain below one percent.

The milk ring test is producing satisfactory results. Our veterinarian and livestock industry enthusiasm is adequate, but we are deficient on several points. The use of strain 19 vaccine, while showing a marked increase over previous years, is still far below our goal. There are, too, a number of areas in this State where adult vaccination was practiced in the past and it is a slow process to get these herds tested. The results in these herds are very encouraging and the majority of owners are amazed to find their herds are almost in a clean status. There is also a problem of getting the owners of grade beef herds interested in a testing program. It would appear logical to assume that at least a portion of South Carolina would qualify as a range or semirange area in that it meets all the qualifications of such an area except its geographic location.

SOUTH DAKOTA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	22,160	52,906
Reactors found	2,010	2,706
Reactors slaughtered	702	1,169
Rate of infection	9.07	5.11
No. of calves officially vaccinated	145,325	178,478
Herds certified	2	1
Counties certified	0	0

The 1955 Legislature passed an act enabling the establishment of a brucellosis control and eradication program in a county or part of a county. The act permits the State livestock sanitary board to establish such a program when 67 percent of the cattle owners owning 75 percent of the cattle sign the petition. The act provides for establishing Plans A, B, and C. Plan D was eliminated.

All services and indemnity are paid from State appropriated and Federally allotted funds. Fifteen counties have been approved as brucellosis control and eradication areas, 31 others have requested petitions. The Extension Service handles the educational program, assisted by veterinarians from the State and Federal offices. Many cattle producers favor going on Plan A as soon as possible. Plans are being discussed to amend the present act to put an area under Plan A if a majority of the producers request such a program.



TENNESSEE

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	38,216	320,790
Reactors found	913	13,905
Reactors slaughtered	733	9,154
Rate of infection	2.39	4.33
No. of calves officially vaccinated	110,684	107,361
Herds certified	710	2,011
Counties certified	0	0

The accelerated brucellosis eradication program was inaugurated in the State of Tennessee January 1955.

During the calendar year 1955, 320,790 agglutination tests disclosed 13,905 reactors. Our eradication efforts have been concentrated in the milk sheds where there was a high percentage of infection. We were able to reduce this infection from a high of 5.9 percent in April 1955 to 1.9 percent in November 1955.

From September to the present time, the bulk of our blood testing has been limited to herds having a suspicious BRT test. Maximum use has been made of our two BRT trailers and all of the milk plants in the State have been sampled once, and the second round of tests has begun.

One hundred three thousand seventy six calves were vaccinated during 1955, and it is believed that this, a most important phase of our brucellosis program, should be continued vigorously in order to attain complete eradication.

If sufficient State and Federal funds are available, we plan to begin testing on an area basis in July 1956, and believe we can obtain a certified-free State by 1960.

TEXAS

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	77,721	84,648
Reactors found	3,602	3,028
Reactors slaughtered	293	416
Rate of infection	4.63	3.58
No. of calves officially vaccinated	47,258	79,588
Herds certified	20	9
Counties certified	0	0

While the new Livestock Sanitary Commission has not yet signed the Memorandum of Agreement, they have indicated that it is their intention to do so in the near future. Some minor changes may be asked for.

We can take a more optimistic outlook of the future as the sentiment seems to be changing among the stockmen, and there are at least 15,000 herds on a calf vaccination program according to the State records.

Of course, as you know, ways and means for financing a program will have to be worked out before an extensive program can be put into effect. If the financial end is worked out, it would be September 1957 before any appropriated funds would become available.

UTAH

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	45,065	62,898
Reactors found	2,002	1,824
Reactors slaughtered	1,401	1,363
Rate of infection	4.44	2.90
No. of calves officially vaccinated	30,038	63,346
Herds certified	11	11
Counties Certified	0	0

Substantial increases were made in all phases of the program during the past year. However, there was a reduction in the volume of work accomplished during the past four months of the calendar year 1955 as compared to the same period for 1954, except for calves vaccinated. A very satisfactory reduction in the percentage of Brucella infection was accomplished which accounts for some of these reductions. Eight counties are nearing completion for certification. There are in each of these counties a few range herds which have not been tested. It is hoped that these tests can be made during the winter months.

The use of practicing veterinarians has not proved entirely satisfactory. Full-time technicians have been used to advantage where veterinary service is not available.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

VERMONT

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	74,030	127,157
Reactors found	1,325	3,655
Reactors slaughtered	6	2,922
Rate of infection	1.79	2.87
No. of calves officially vaccinated	57,614	54,989
Herds certified	1,655	2,046
Counties certified	0	0

Brucellosis eradication in Vermont was somewhat handicapped in the summer and fall of 1955 by lack of funds.

Three Statewide ring tests were conducted from October 1954 to January 1956. Comparison of data on the first and second ring tests indicated a reduction of about 8 percent in the number of suspect herds, probably due to disposal of approximately 2,700 reactors through slaughter. Cleaning and disinfecting were conducted on all premises where indemnity was paid.

In all except one area sufficient veterinary personnel seems to be available. This area was serviced by technicians.

Swine in Vermont are not tested. Goats are tested upon owner's application.

The regular State appropriation for fiscal year 1957 has been increased by about \$4,000. It is believed that with adequate State-Federal funds our goal of a certified State by 1960 may be achieved.



VIRGINIA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	255,391	384,136
Reactors found	6,455	5,320
Reactors slaughtered	5,807	993
Rate of infection	2.53	1.38
No. of calves officially vaccinated	76,351	87,692
Herds certified	531	936
Counties certified	0	0

Substantial increases have been made in all phases of brucellosis eradication during the past year. All reactors are branded, tagged and appraised when disclosed. Laws are adequate for area work.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

WASHINGTON

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	248,529	259,820
Reactors found	3,203	2,782
Reactors slaughtered	3,963	2,884
Rate of infection	1.29	1.07
No. of calves officially vaccinated	86,122	86,974
Herds certified	1	10
Counties certified	20	30

The brucellosis program has progressed satisfactorily in general.

State law and regulations have been strengthened to provide maximum service and protection to the individual herd owner. Livestock owners have become more familiar with herd management and sanitation to maintain clean herds.

There are 175 veterinarians in the State who have signed up to do testing and vaccination on fee basis.

Sale of cattle or dairy products is restricted unless originating from negative herds.

The testing of milk samples from all dairy herds at six-month intervals and testing of cattle at community sales and abattoirs is providing screening necessary to maintain certified counties.

Thirty counties are certified brucellosis-free and the area work in the nine remaining counties is well advanced.

Every effort is being made to protect herds and areas now clean and we feel that Federal regulations controlling interstate shipment of cattle would greatly assist in protecting an importing State such as Washington.

We hope to reach the goal of a modified certified brucellosis-free State by July 1, 1956.

WEST VIRGINIA

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	108,537	169,598
Reactors found	1,154	1,669
Reactors slaughtered	1,090	1,832
Rate of infection	1.06	0.98
No. of calves officially vaccinated	7,295	10,365
Herds certified	441	480
Counties certified	14	14

Substantial increases were made in all phases of the program during the past year. The percentage of infection is below the requirement for certification. However, due to the shortage of personnel, complete area testing has not been achieved in many counties.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

WISCONSIN

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	712,169	2,001,598
Reactors found	23,340	95,949
Reactors slaughtered	11,858	89,751
Rate of infection	3.28	4.79
No. of calves officially vaccinated	456,854	516,880
Herds certified	3,461	3,159
Counties certified	1	40

Brucellosis is fast becoming a thing of the past in Wisconsin. 1955 has seen the blanketing in of all counties under a compulsory test and slaughter program. The amount of blood testing is about threefold higher than 1954 which was the previous all-time high. The ring test which is run on all milk producing herds once each six months shows a decline to 16 percent suspicious herds at the close of the ninth round completed in December. Calf vaccination has remained comparable with previous years with 516,880 calves vaccinated in 1955. Forty of Wisconsin's 71 counties have completed requirements and have been declared modified brucellosis-free counties. The testing of all beef herds and suspicious ring test herds in noncertified counties is presently being completed with the goal of Statewide certification set for July 1, 1956.



WYOMING

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	37,588	49,846
Reactors found	802	925
Reactors slaughtered	522	777
Rate of infection	2.13	1.86
No. of calves officially vaccinated	66,112	118,941
Herds certified	3	6
Counties certified	0	0

The interest of the livestock owners in the brucellosis eradication program has shown a steady increase, especially in calf vaccination. More cattle have been tested with fewer reactors found and more calves vaccinated as compared to last year. The milk ring test is conducted on all commercial dairy herds at 6-month intervals. The percentage of suspicious herds has decreased materially. .

The outstanding progress made this year is the decision handed down by the Wyoming State Attorney General to the effect that under existing statutes the Wyoming Livestock and Sanitary Board is authorized to make rules and regulations for the control and eradication of animal diseases. Acting upon this decision the Board instigated regulations permitting area work. Petitions are now being circulated in nine of our 23 counties, and plans are under way for petitions in portions of those remaining. Indications are that the Wind River Indian Reservation will be eligible for certification this year.

The objective is to have the State ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

PUERTO RICO

	January 1 to December 31, 1954, Inc.	January 1 to December 31, 1955, Inc.
Cattle tested	63,428	215,071
Reactors found	1,130	2,386
Reactors slaughtered	249	2,539
Rate of infection	1.78	1.11
No. of calves officially vaccinated	12,046	13,688
Herds certified	0	0
Counties certified	39	40

Puerto Rico has a compulsory eradication program which was inaugurated in May 1948. The program follows the Uniform Methods and Rules for the Establishment of Certified Brucellosis-Free Herds of Cattle and Modified Certified Areas.

Infection has been reduced from 3.37 percent found in a survey performed in 1948-49 to 1.6 percent. Of the 77 municipalities in the Island, 40 have been classified as modified certified brucellosis-free areas.

During the accelerated program started in November 1954, emphasis was given to changing all Plan B herds to Plan A. Only 101 herds remain in Plan B. This phase of the work and area testing were discontinued because of the depletion of funds in September 1955.

At present, the great shortage of fee basis veterinarians hinders the development of the program.

The objective is to have Puerto Rico ready for certification as a modified certified brucellosis-free area on or before January 1, 1960.

SUMMARY OF MAJOR PROVISIONS OF  
PROPOSED RULE MAKING  
BRUCELLOSIS IN DOMESTIC ANIMALS  
INTERSTATE MOVEMENT OF ANIMALS  
(9 CFR PART 78)

Subpart B.

I. (78.5) 78.12 - INTERSTATE MOVEMENT OF BRUCELLOSIS REACTORS

Brucellosis reactors may move interstate only for immediate slaughter either (a) directly to plants operating under Federal meat inspection, or (b) to public stockyards (stockyards maintaining Federal inspection) for sale to Federally inspected slaughtering establishments. The cattle must be accompanied by a certificate issued by a Federal or State inspector or an accredited veterinarian showing the reactor tag number of each animal and must be branded with "B" on the left jaw.

Subpart C.

II. 78.13 - INTERSTATE MOVEMENT OF CATTLE NOT KNOWN TO BE AFFECTED WITH BRUCELLOSIS

A. Movement of Steers, Spayed Heifers, and Calves under 8 Months

Steers, spayed heifers and calves under 8 months of age may move interstate without restriction.

B. Movement to Public Stockyards and Federally Inspected Slaughtering Establishments

Cattle may move interstate to Federally or State inspected, or State-Branch approved slaughtering establishments and to public stockyards if accompanied by a waybill showing: (1) Name and address of shipper, (2) number of animals in the shipment, (3) their origin, and (4) their destination.

C. Movement into Non-Certified Areas

Cattle of certain specified classes (see below) may move interstate into non-certified areas if accompanied by a certificate issued by (1) a State inspector, (2) a Federal inspector, or (3) an accredited veterinarian showing one of the following for each animal: (1) Identification tag number, (2) identifying tattoo, (3) registration number, or (4) a "V" brand of official vaccinates under 30 months of age. (Official vaccinates are bovine animals vaccinated for brucellosis, under supervision of a Federal or a State veterinary official, when 4 through 8 months of age, or when 4 to 12 months of age in the case of beef calves in range or semirange areas.)

The following classes of cattle are permitted to move interstate under this provision:

- (1) Cattle negative to a test within 30 days before movement.
- (2) Official vaccinates under 30 months of age.



- (3) Bulls and female beef cattle for feeding or grazing purposes, under permit of the State of destination, if they are to be kept under official quarantine and segregated from other cattle.
- (4) Cattle originating in a modified certified brucellosis-free area. (A State or county in which it has been officially determined that not more than 1 percent of the cattle and 5 percent of the herds are affected with brucellosis.)
- (5) Cattle originating in a certified brucellosis-free herd. (A herd which has been officially determined to be free from brucellosis.)

D. Movement into Certified Areas

Cattle of certain specified classes (see below) may move interstate into modified certified brucellosis-free areas if accompanied by a certificate issued by (1) a State inspector, (2) a Federal inspector, or (3) an accredited veterinarian, showing one of the following for each animal: (1) Identification tag number, (2) identifying tattoo, (3) registration number, or (4) a "V" brand of official vaccinates under 30 months of age.

The following classes of cattle are permitted to move under this provision:

- (1) Cattle originating in certified brucellosis-free herds.
- (2) Cattle originating in modified certified brucellosis-free areas.
- (3) Official vaccinates under 30 months of age.
- (4) Cattle from herds, under Federal-State brucellosis programs, in which all cattle over 8 months of age (except official vaccinates under 30 months of age) are negative to a brucellosis herd test within 90 days of shipment. The individual animals to be shipped must be found negative to another test at least 30 days after the herd test and within 30 days of shipment.
- (5) Cattle negative to a brucellosis test within 30 days before shipment, under permit from the State of destination, if they are to be kept under official quarantine and segregated from other cattle until they are tested again at least 30 days after arrival at destination and found negative or until their death.
- (6) Bulls and female beef cattle for feeding or grazing purposes, under permit of the State of destination, if they are to be kept under official quarantine and segregated from other cattle.

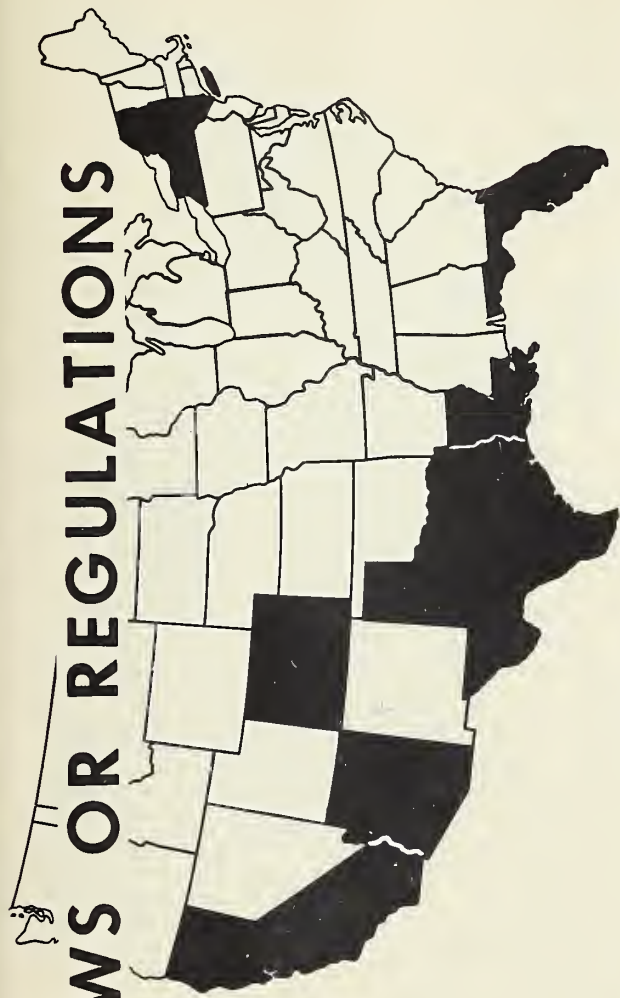
III. INTERSTATE MOVEMENT OF CATTLE NOT OTHERWISE AUTHORIZED

Other interstate movement of cattle not provided for under this subpart may be authorized by the Chief of the Animal Disease Eradication Branch, Agricultural Research Service.

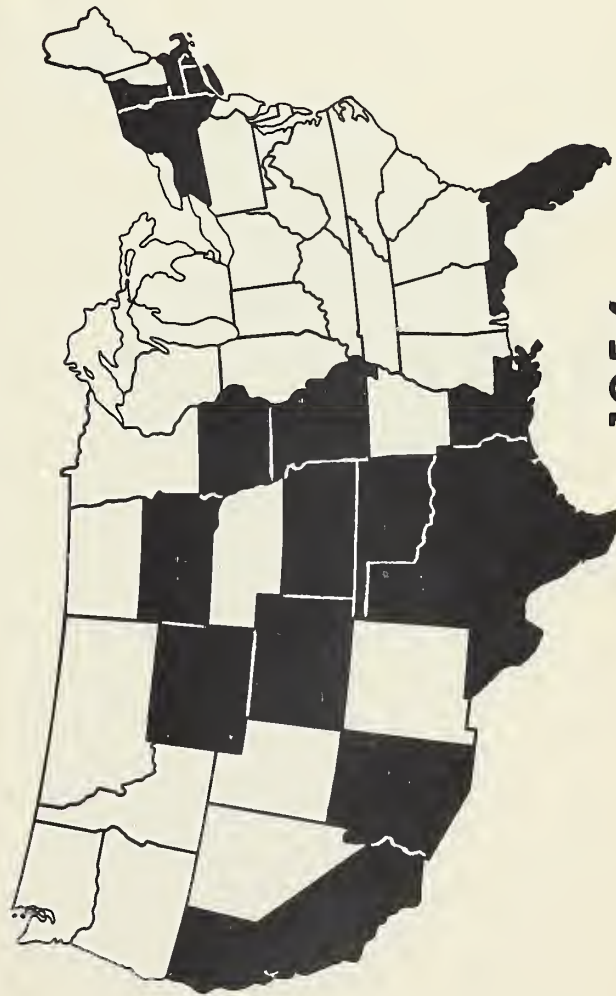
January 5, 1956



# STATES WITH LAWS OR REGULATIONS AUTHORIZING AREA WORK

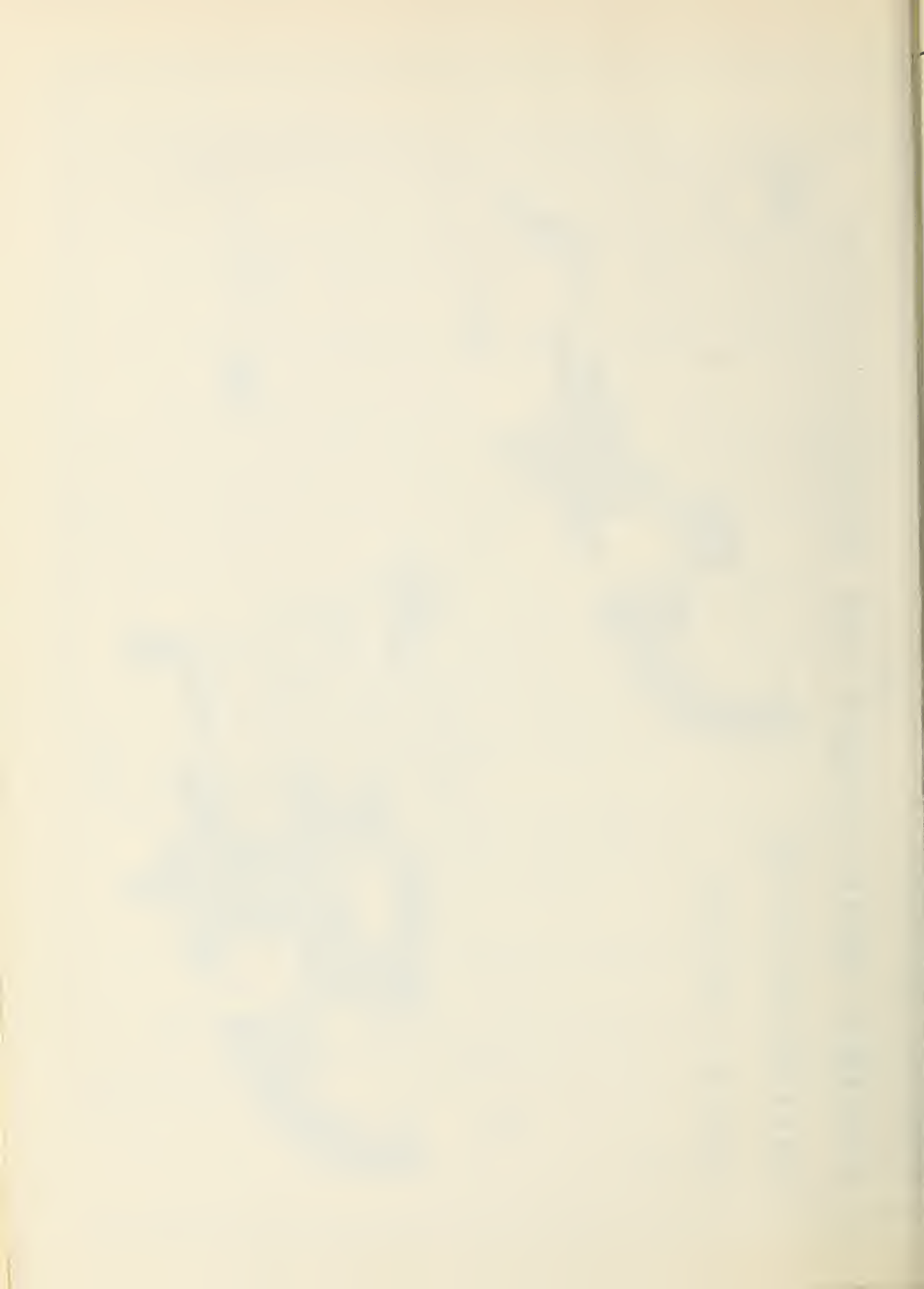


1955

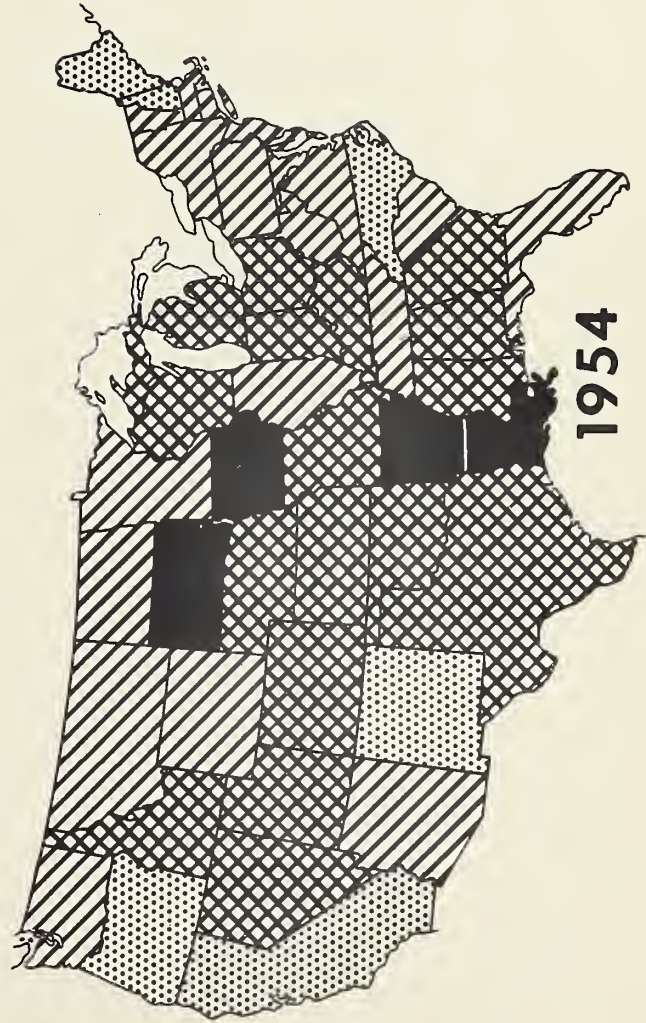
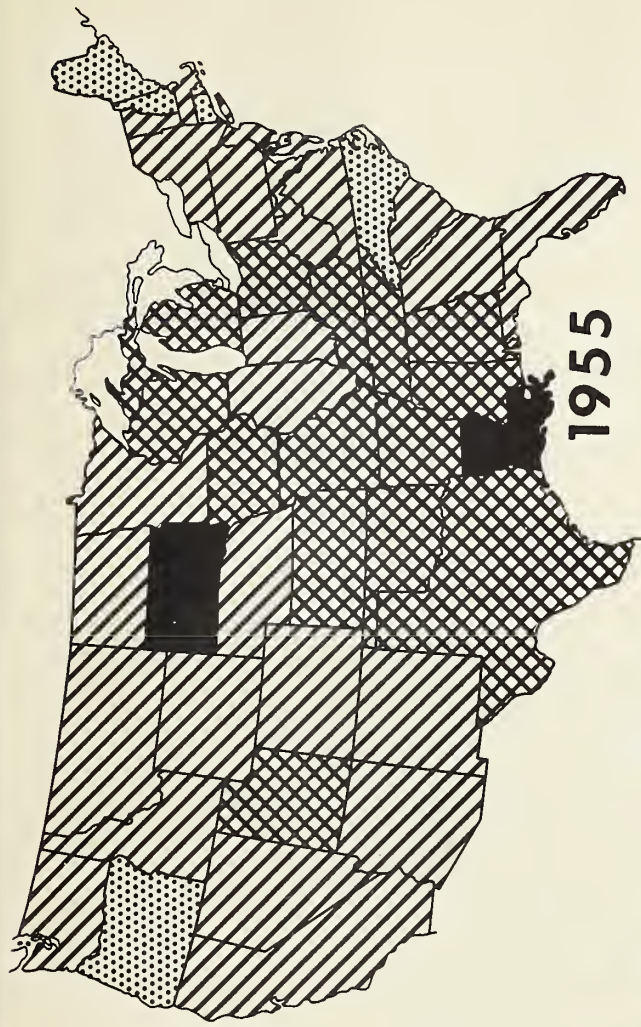


1954

WITH  
WITHOUT



# REACTORS FOUND



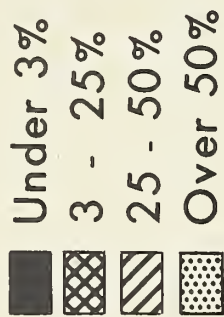
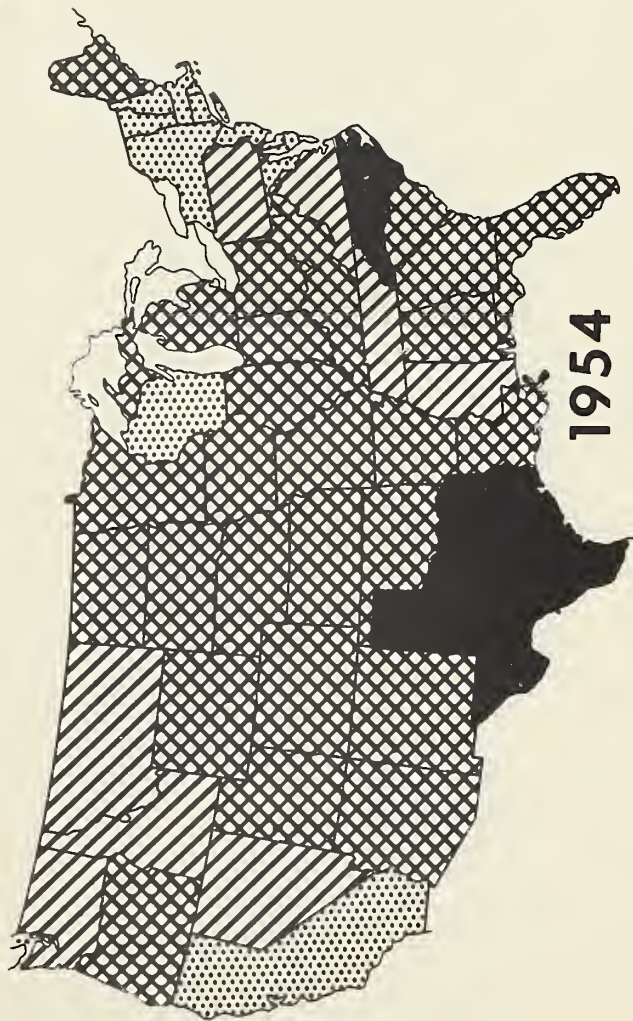
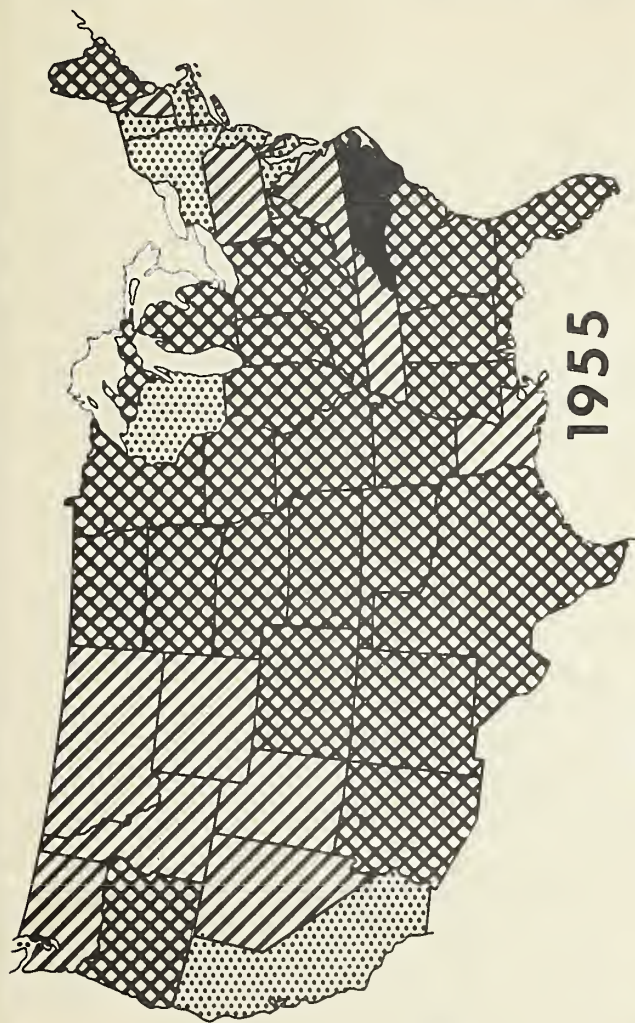
Under 1%  
1 - 2.9%  
3 - 5.9%  
6 - 10%

% BASED ON CATTLE BLOOD TESTED





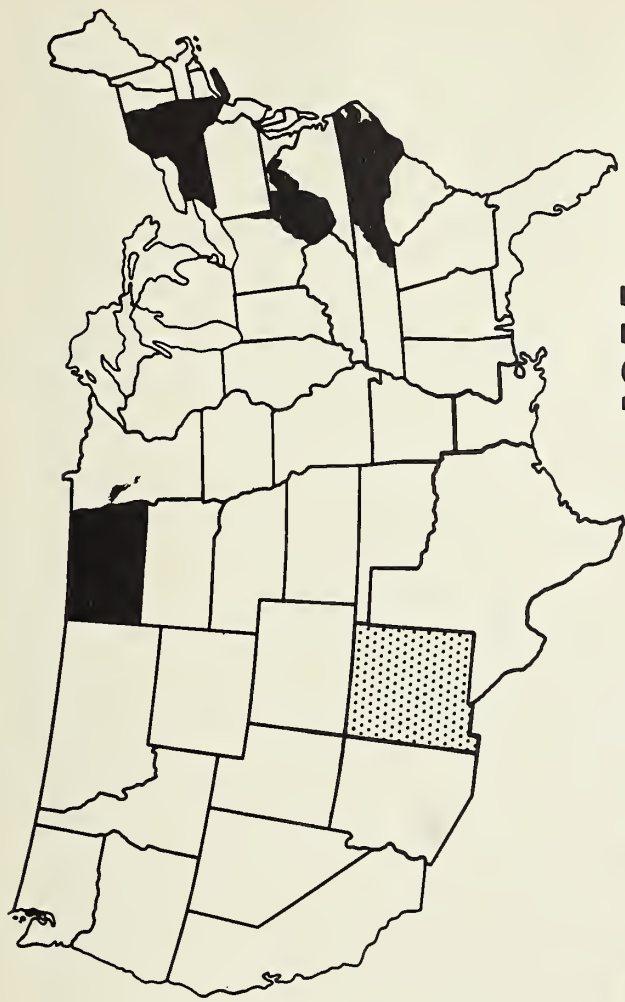
# CALVES OFFICIALLY VACCINATED



% BASED ON NUMBER OF CALVES  
RETAINED ANNUALLY



# STATE BRUCELLOSIS COMMITTEES



1955

COMMITTEES  
INACTIVE  
NO COMMITTEES



1954





# BRUCELLOSIS ERADICATION PROGRAM

% OF SEPT. 1954

200

100

0

Calves vaccinated

Cattle tested

Herds tested

131% (498,000)

81% (1,410,000)

37% (85,000)

(215,000)

(777,000)

(62,000)

S O N D J F M A M J J A S O N D J F M A M J J A S O N D

1954

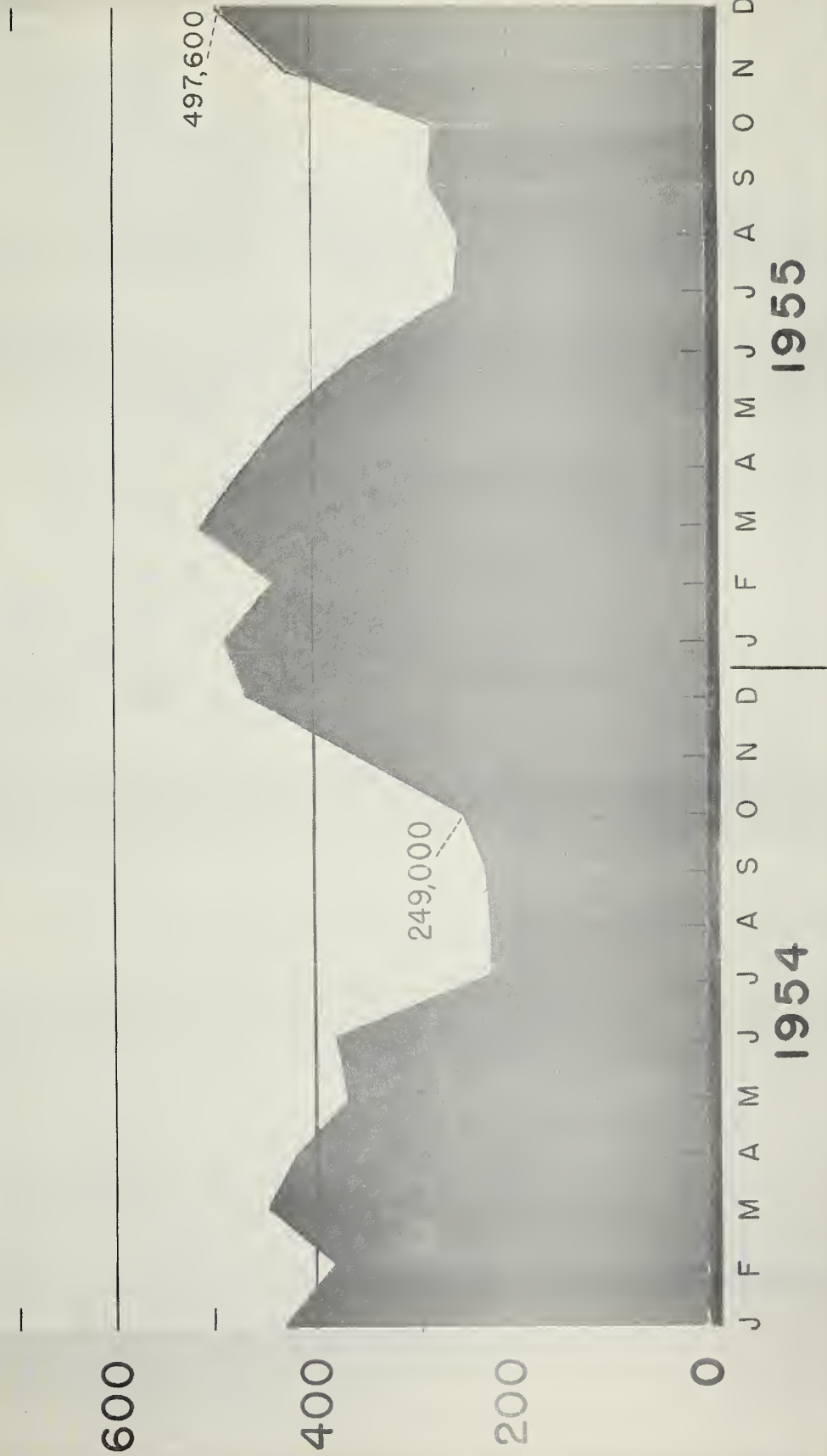
1955

1956



# CALVES VACCINATED FOR BRUCELLOSIS

THOUSANDS

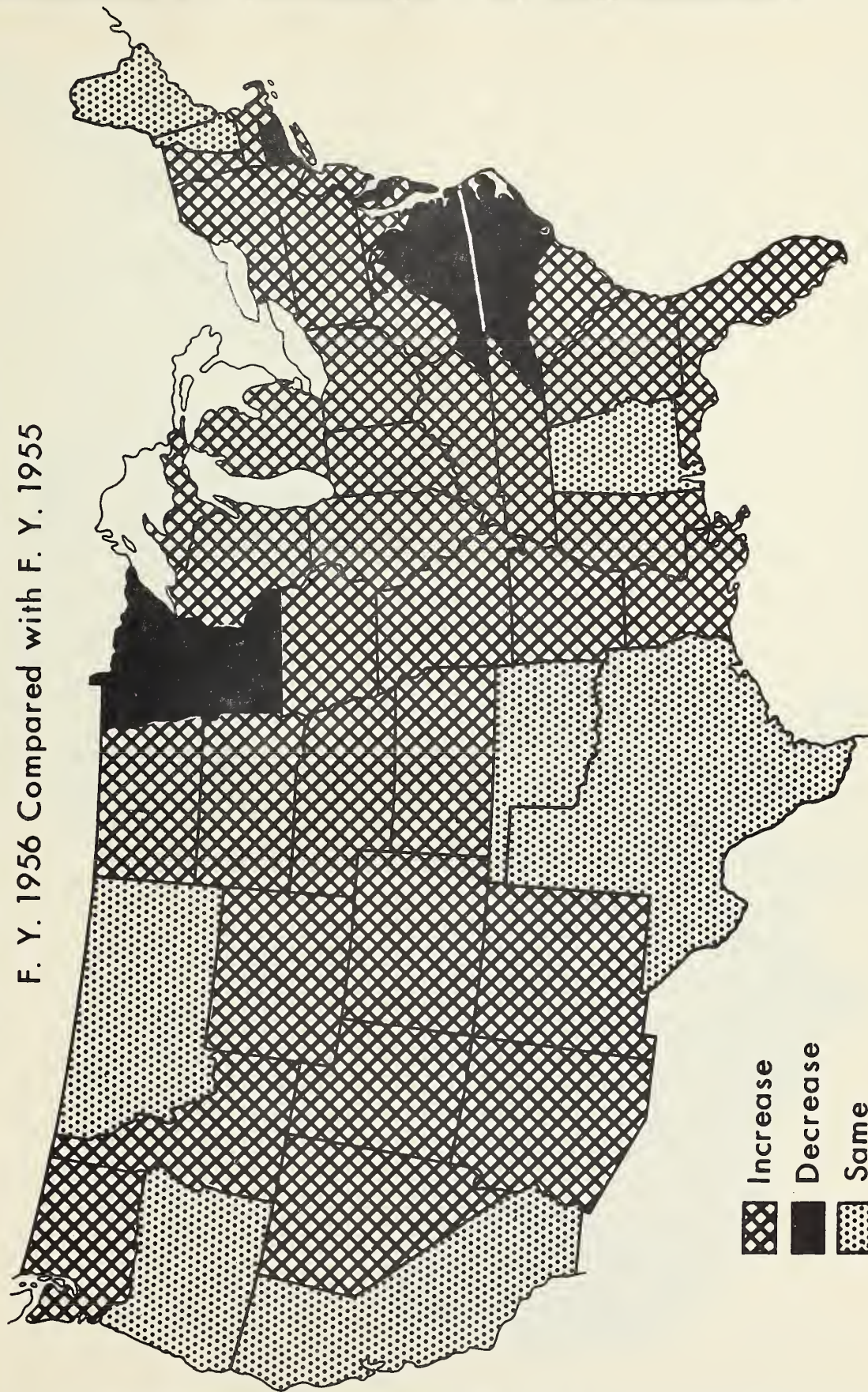






# STATE FUNDS AVAILABLE

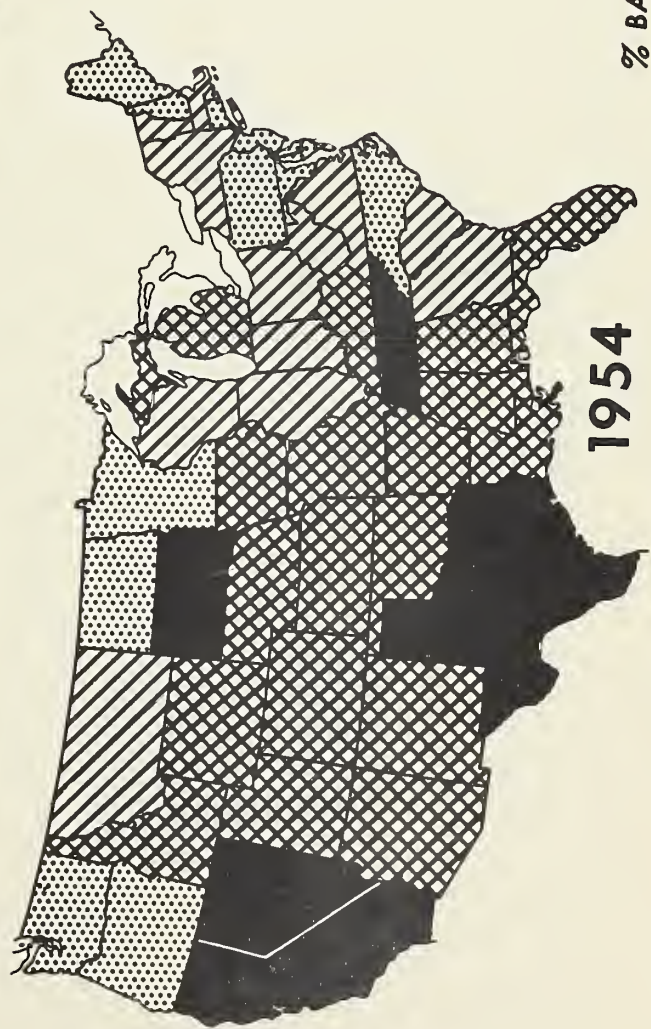
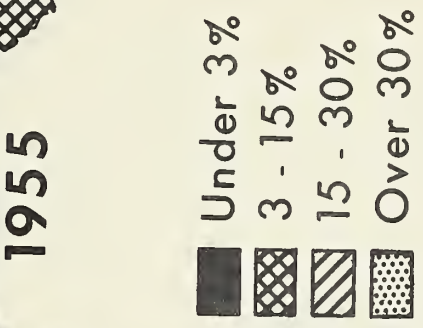
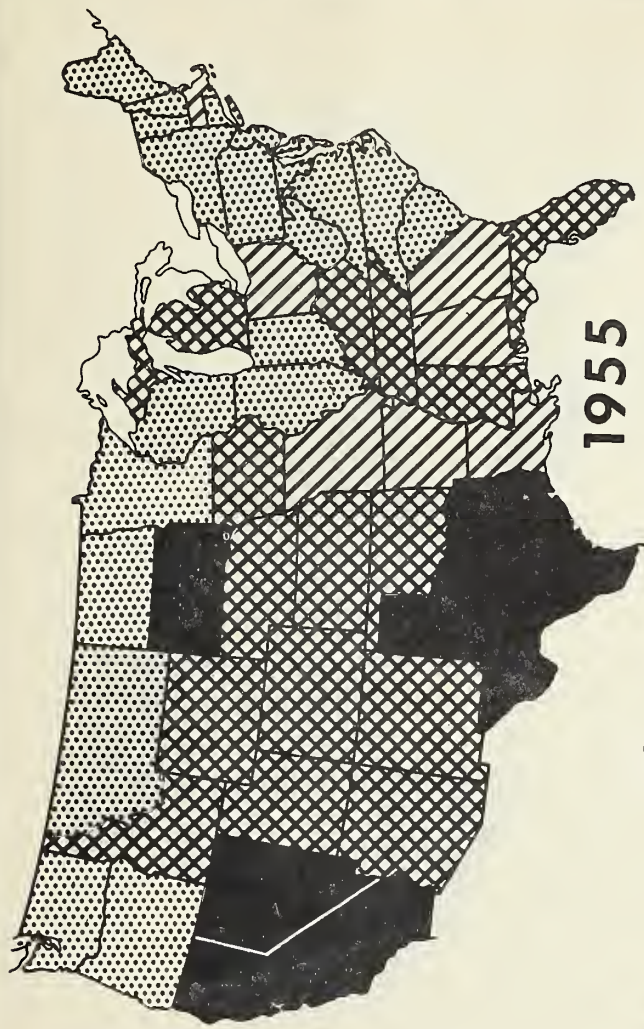
F. Y. 1956 Compared with F. Y. 1955







**CATTLE  
BLOOD  
TESTED**



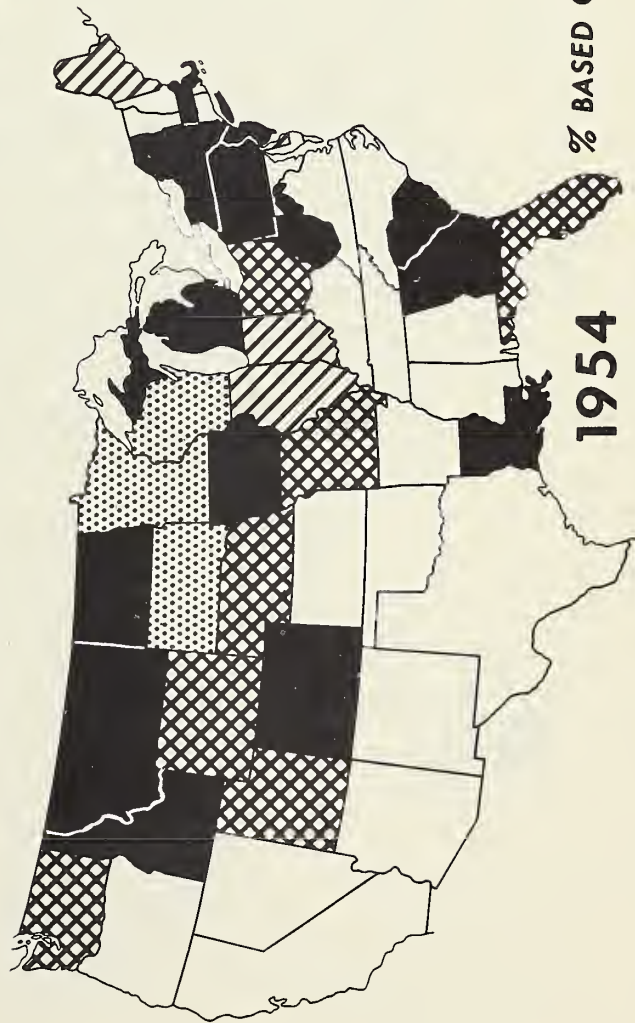
% BASED ON BREEDING CATTLE POPULATION





Bovine Brucellosis

**MILK  
RING  
TEST**

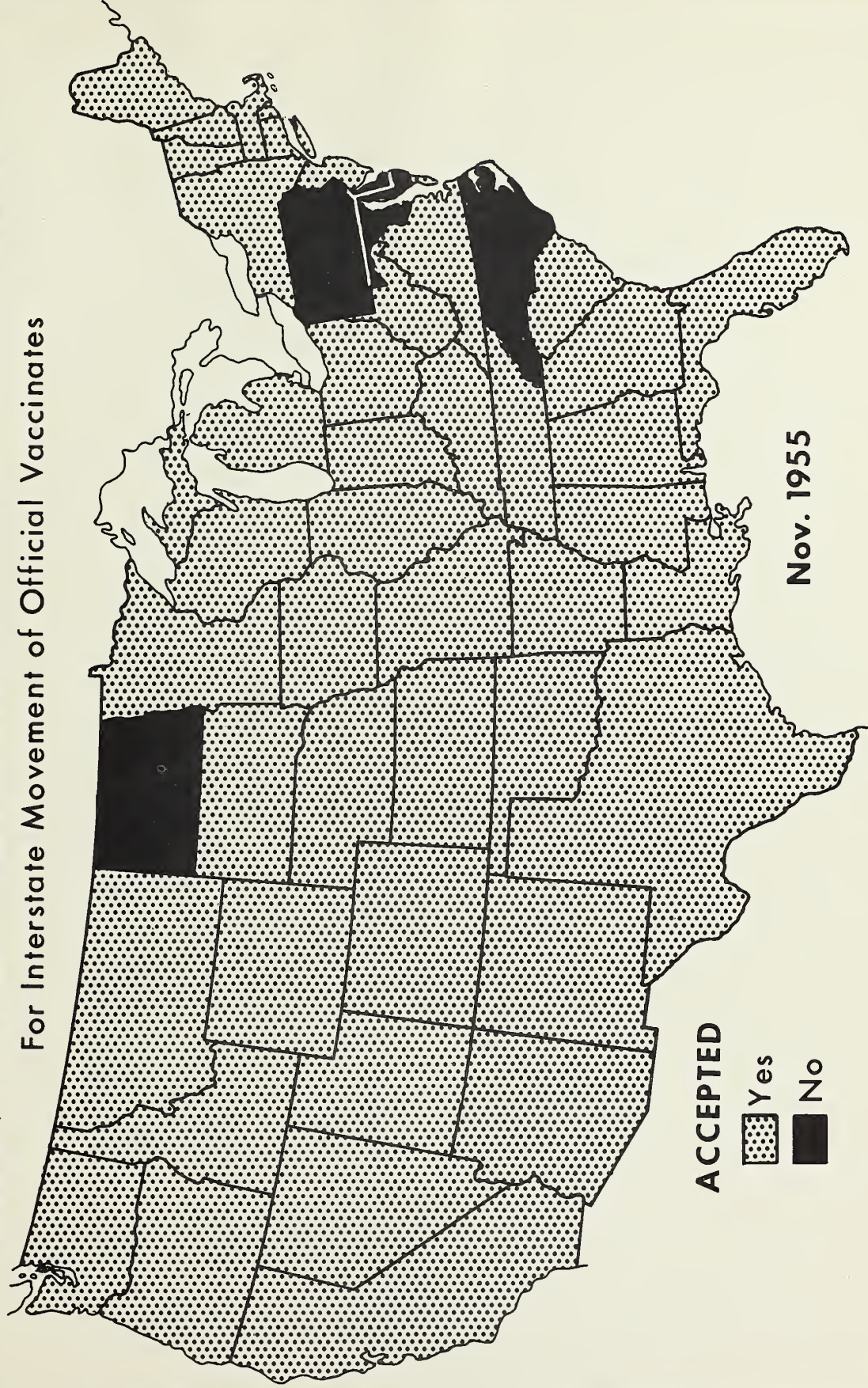


% BASED ON ESTIMATED CATTLE RING TESTED AND  
DAIRY CATTLE POPULATION



# NEW INTERPRETATION OF BLOOD TEST

For Interstate Movement of Official Vaccinates









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